

Claims

1. A recombinant microorganism of the genus *Sinorhizobium* which is transformed with a vector containing pyridoxol 5'-phosphate synthase gene and D-erythrose 4-phosphate dehydrogenase gene, and being capable of producing vitamin B₆.
- 5 2. The microorganism according to claim 1, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* or *Sinorhizobium meliloti*.
3. The microorganism according to claim 1, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* K12 or *Sinorhizobium meliloti* IFO 14782.
4. The microorganism according to claim 1, wherein the pyridoxol 5'-phosphate synthase
10 gene is derived from *Sinorhizobium meliloti* IFO 14782.
5. The microorganism according to claim 1, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* K12.
6. The microorganism according to claim 1, wherein the D-erythrose 4-phosphate dehydrogenase gene is derived from microorganism of *Escherichia coli* or *Vibrio cholerae*.
- 15 7. The microorganism according to claim 1, wherein the D-erythrose 4-phosphate dehydrogenase gene is derived from microorganism of *Escherichia coli* K12.
8. The microorganism according to claim 1 which is *Sinorhizobium meliloti* IFO 14782/pVK611.
9. A process for preparing vitamin B₆ by cultivating a recombinant microorganism of the
20 genus *Sinorhizobium* which is transformed with a vector containing pyridoxol 5'-phosphate synthase gene and D-erythrose 4-phosphate dehydrogenase gene, and being capable of producing vitamin B₆ which comprises cultivating the recombinant microorganism under aerobic conditions at a pH value of about 5.0 to 9.0, at a temperature of 10°C to 40°C, and for 1 day to 15 days in a medium containing an assimilable carbon source, a
25 digestible nitrogen source, inorganic salts, and other nutrients necessary for the growth of the microorganism, and then recovering vitamin B₆ formed and accumulated in the culture broth.
10. The process according to claim 9, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* or *Sinorhizobium meliloti*.

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11. The process according to claim 9, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* K12 or *Sinorhizobium meliloti* IFO 14782.
12. The process according to claim 9, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Sinorhizobium meliloti* IFO 14782.
- 5 13. The process according to claim 9, wherein the pyridoxol 5'-phosphate synthase gene is derived from *Escherichia coli* K12.
14. The process according to claim 9, wherein the D-erythrose 4-phosphate dehydrogenase gene is derived from microorganism of *Escherichia coli* or *Vibrio cholerae*.
15. The process according to claim 9, wherein the D-erythrose 4-phosphate dehydrogenase
10 gene is derived from microorganism of *Escherichia coli* K12.
16. The process according to claim 9, wherein the recombinant microorganism is *Sinorhizobium meliloti* IFO 14782/pVK611.
